

## II. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for creating a web page source file in a programmed computer, the method comprising:
  - a) inserting an instance of a client object into a web page;
  - b) permitting the client object instance to obtain from a switchboard a list of available reusable software components for use in the web page;
  - c) receiving from an author selection information identifying a selected one of the available components;
  - d) displaying a customizer interface and permitting an author to specify properties for the selected available component;
  - e) generating runtime text corresponding to the selected available component; ~~and~~;
  - f) providing the runtime text to the client object; and
  - g) writing information identifying and specifying the properties of the client object instance used in the web page and identifying the selected available component included in the web page to the web page source file.
2. (Original) The method of claim 1 wherein the client object comprises a design time control.
3. (Original) The method of claim 1 wherein the client object comprises a Java bean encapsulated in an Active X control.
4. (Original) The method of claim 1 wherein displaying a customizer interface comprises, invoking a method of the client object to request that the switchboard provide the customizer interface.

5. (Original) The method of claim 4 wherein displaying the customizer interface comprises passing from the client object to the switchboard identification information which identifies the selected one of the available components and, at the switchboard, obtaining a list of properties of the selected one of the available components and providing in the customizer interface a control for setting a value of each of the properties.
6. (Original) The method of claim 5 wherein displaying the customizer interface comprises providing to the switchboard previously generated runtime text and the method comprises, determining from the runtime text a previously set value for each of the properties and displaying the previously set value for each of the properties in the customizer interface.
7. (Original) The method of claim 1 wherein generating the runtime text comprises providing an initial tag, a final tag, and runtime text between the initial and final tags.
8. (Original) The method of claim 7 wherein the initial tag includes identification information for the selected available component.
9. (Original) The method of claim 7 wherein generating the runtime text comprises determining whether or not all of the properties are set to default values, in response to the determination, generating a default tag, the default tag having a value which indicates whether or not all of the properties are set to default values, and inserting the default tag into the runtime text.
10. (Original) The method of claim 9 comprising producing a source file containing the runtime text.

11. (Original) The method of claim 10 comprising updating the source file by: identifying runtime text by locating the initial and final tags in the source file; if the default tag indicates that all of the properties are set to default values, determining whether there is a newer version of the component corresponding to the runtime text and, if there is a newer version of the component, generating runtime text corresponding to the newer version of the component, and replacing the runtime text in the source file with the runtime text corresponding to the newer version of the component.
12. (Original) The method of claim 1 wherein displaying the customizer interface comprises causing the client object to invoke a function and providing the runtime text to the client object comprises supplying the runtime text to the function and permitting the function to return the runtime text to the client object.
13. (Currently Amended) A method for updating a web page comprising one or more reusable software components, the method comprising:
- providing a web page comprising one or more instances of a client object, each instance of the client object having selection information identifying an original reusable software component for use in a web page, the original reusable software component having one or more configurable properties;
  - providing an updated set of software components;
  - reading from an instance of the client object the selection information and determining whether a newer version of the reusable software component identified by the selection information is available; and,
  - if a newer version of the reusable software component identified by the selection information is available, replacing the selection information with new selection information identifying the newer version of the reusable software component, wherein the selected reusable software component is replaced with the newer version without re-specifying all properties of the selected reusable software component.

14. (Original) The method of claim 13 wherein the newer version of the reusable software component has a common set of one or more properties in common with a set of properties of the original reusable software component and the method comprises:
- determining values for properties in the common set of the original reusable software component; and,
  - automatically setting values for the properties in the common set of the newer version of the reusable software component to be the same as the values of the properties in the common set of the original reusable software component.
15. (Original) The method of claim 14 wherein determining values for properties in the common set of the original reusable software component comprises reading runtime text corresponding to the original reusable software component.
16. (Currently Amended) A method for updating source code for a web page, the source code comprising one or more blocks of runtime text each corresponding to a configurable reusable component, each block of runtime text comprising a default indicator indicating whether or not the corresponding configurable reusable component was in a default configuration, the method comprising:
- selecting a block of runtime text for which the default indicator indicates that the corresponding configurable reusable component for use in the web page was in a default configuration;
  - identifying a configurable reusable component corresponding to the selected block of runtime text;
  - determining whether there is a newer version of the configurable reusable component;
  - based on the determining step, if there is a newer version of the configurable reusable component, generating runtime text corresponding to the newer version of the configurable reusable component; and,

e) replacing the block of runtime text in the source code that describes components included in the web page with the runtime text corresponding to the newer version of the component,  
wherein the selected reusable component may be replaced with the newer version without re-specifying all properties of the selected reusable component.

17. (Original) The method of claim 16 comprising repeating the steps recited in claim 16 for all of the blocks of runtime text for which the default indicator indicates that the corresponding configurable reusable component was in a default configuration.

18. (Original) The method of claim 17 wherein the default indicator comprises a tag.

19. (Currently Amended) Apparatus for creating web pages, the apparatus comprising a computer system having:

- a) a client software object, the client software object capable of retrieving a list of one or more available reusable software components for use in a web page, identifying a selected one of the available reusable software components selected by an author, and receiving runtime text corresponding to the selected reusable software component;
- b) web publishing software capable of incorporating runtime text from one or more instances of the software client object in a source file that describes the components included for a the web page; and,
- c) switchboard software capable of generating runtime text corresponding to the selected reusable component and providing the runtime text to a corresponding instance of the client software object for inclusion in the runtime file.

20. (Original) The apparatus of claim 19 wherein the client software object comprises a Design Time Control.

21. (Original) The apparatus of claim 19 wherein client software object comprises a Design Time Control, the Design Time Control comprising a JAVA Bean encapsulated in an Active X control.
22. (Original) The apparatus of claim 19 comprising an update tool, the update tool comprising software which causes the computer system to:
- a) read properties of an original instantiated reusable component;
  - b) instantiate an updated version of the instantiated reusable component; and,
  - c) configure properties of the updated version of the instantiated reusable component to match the properties of the original instantiated reusable component.
23. (Currently Amended) Apparatus for creating web pages, the apparatus comprising a computer system providing:
- a) one or more available reusable software components for use in a web page, each comprising rules for the generation of corresponding runtime text;
  - b) a means for providing a list of available reusable components;
  - c) a means for configuring properties of a selected reusable component;
  - d) a client software object, adapted to receive the list of available reusable components, to allow an author to select one of the available reusable components and to receive runtime text from the selected one of the available reusable components for placement in a source file that describes the components included in the web page.
24. (Original) The apparatus of claim 23 comprising web publishing software capable of instantiating a plurality of instances of the client software object and incorporating the received runtime text from each of the instances of the client software object into a source file.
25. (Original) The apparatus of claim 24 wherein the client software object comprises a design time control.

26. (Original) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for creating a web page according to any of claims 1, 13, 16, 17 or 18.

27. (Previously Presented) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for creating a web page according to claim 13.

28. (Previously Presented) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for creating a web page according to claim 16.

29. (Currently Amended) An article comprising:

- a) a computer-readable signal-bearing medium;
- b) means in the medium for delivering to a client object instance in a web page a list of available reusable software components for use in the web page;
- c) means in the medium for receiving selection information identifying a selected one of the available components;
- d) means in the medium for displaying a customizer interface and receiving information specifying properties for the selected one of the available components;
- e) means in the medium for generating runtime text corresponding to the selected one of the available components; and
- f) means in the medium for providing the runtime text to the client object.

30. (Previously Presented) The article of claim 29, wherein the medium is a tangible data storage medium.

31. (Currently Amended) An article comprising:

- a) a computer-readable signal-bearing medium;
- b) switchboard software on the signal-bearing medium, the switchboard software comprising:
  - i) a client object interface capable of providing a list of available components for use in a web page to an instance of a client object and receiving selection information identifying a selected one of the available components from the instance of the client object;
  - ii) a customizer interface capable of displaying current values for one or more configurable properties of the selected one of the available components and receiving configuration information specifying new values for the one or more configurable properties; and,
  - iii) a run-time text generator generating run-time text in response to the selection information and the configuration information and forwarding the run-time text to the instance of the client object for inclusion in a web page.

32. (Previously Presented) The article of claim 31 further comprising library software on the signal-bearing medium, the library software comprising a plurality of available components.

33. (Previously Presented) The article of claim 32 wherein the library software comprises library management software which, when executed, maintains a list of available components in the library.



34. (Previously Presented) The article of claim 31 further comprising an update tool on the signal-bearing medium, the update tool comprises software which, when run on a computer system, causes the computer system to: read properties of an original instantiated reusable component; instantiate an updated version of the instantiated reusable component; and, configure properties of the updated version of the instantiated reusable component to match the properties of the original instantiated reusable component.
35. (Previously Presented) The article of claim 31 further comprising a client object on the signal-bearing medium, the client object adapted to be incorporated into a web page by web publishing software, the client object comprising computer executable instructions for requesting from the switchboard a list available components.
36. (Previously Presented) The article of claim 31, wherein the medium is a tangible data storage medium.